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ELSEVIER

RECOMMENDED ARTICLES

In this issue of the journal, recommended articles are selected from the *Journal of Meridian and Acupoint* (ISSN: 1229-7933) and from the *Journal of Korean Pharmacopuncture Institute* (ISSN: 1226-4849), which were published in the Korean language.

(1) **Journal of Meridian and Acupoint, Vol 27, No. 1, 1–12, 2010**

A Study on Analyzing Wiry Pulse in Hypertensive Patients at Five Levels of Applied Pressure by Using a 3-dimensional Pulse Imaging Analyzer

Hee-Jung Kang, Young-Sang Kwon, Dal-Lae Kim, Kyung-Cheol Kim, Yun-Kyoung Yim

Abstract
Objective: The purpose of this study is to gain objective indicators for the classification of hypertension through oriental medical pulse diagnosis by finding the parameters that can be used to distinguish the pulse of a hypertensive patient from that of a normal subject and by characterizing the wiry pulse of hypertension.
Methods: Nine hundred and forty-six healthy male volunteers and 35 hypertensive male patients, ages 30–59 years, were enrolled in this study. All the hypertensive patients were taking medicine to control their blood pressure, and the blood pressure of the hypertension group was not statistically different from that of the normal healthy group. Data were acquired using a 3-dimensional pulse imaging analyser (DMP-3000, DAEYOMEDI, KOREA) and were analyzed according to age groups and applied pressure levels.
Results: The ratios between the pulse intensities and the time intervals (RAI/t, w/t and t2/t) decreased with increasing level of applied pressure and increased with increasing age in the normal healthy group, but not in the hypertension group. The RAI/t, w/t, and t2/t were significantly higher in the hypertension group than in the normal healthy group for patients in their fourth decade and the elasticity coefficient was higher in the hypertension group than in the normal healthy group for patients in their fifth decade. Research on the patients without hypotensive agents is needed to determine whether these parameters are the components of a hypertensive wiry pulse.
Conclusions: Analyzing the radial pulse at five applied pressure levels by using a 3-dimensional pulse imaging analyzer may be useful to differentiate the pulses of hypertensive patients from those of the normal subjects and to characterize hypertension.
Key Words: Pulse diagnosis, Radial pulse waveform, Applied pressure, Pulse imaging analysis

(2) **Journal of Meridian and Acupoint, Vol 27, No. 1, 31–47, 2010**

Immunomodulatory Activity of Cultivated Wild Ginseng Pharmacopuncture

Young-jin Kim, Joon-Moo Lee, Eun Lee

Abstract
Objective: This study addressed the investigate the anti-inflammatory effects of cultivated wild ginseng pharmacopuncture in the lipopolysaccharide (LPS)-induced inflammatory rat model.
Methods: Sprague-Dawley rats were divided into 4 groups: LPS control ($n=6$), LPS+cultivated wild ginseng pharmacopuncture at CV4 ($n=6$), LPS+ cultivated wild ginseng pharmacopuncture at CV17 ($n=6$), and LPS+ cultivated wild ginseng pharmacopuncture at Ex-HN1 ($n=6$). Pharmacopuncture (0.1 mL) was given every 2 days for 4 weeks, followed by inflammation induction by using a peritoneal LPS injection (5 mg/kg). Blood, liver tissue, and peritoneal lavage fluid were taken, and proinflammatory cytokines and other related factors were analyzed.
Results: Compared with the control group, the CV4 and the Ex-HN1 pharmacopuncture groups significantly attenuated plasma IL-1β, IL-6, and TNF-α increase at 2 hours and 5 hours after LPS injection ($p<0.05$). A significant difference from control group emerged at 5 hours for plasma IL10 ($p<0.05$). For liver cytokines analyzed at 5 hours after LPS injection, only the CV4 pharmacopuncture group showed significant differences in TNF-α and IL-10 ($p<0.05$). For all pharmacopuncture groups, the blood CD4/CD8 ratios and the phagocytic activities of polymorphonuclear neutrophils were not different from those of control group ($p>0.05$). Compared with the control group, CV4 pharmacopuncture significantly attenuated the increases of plasma NO_3^-/NO_2^-, intracellular adhesion molecule-1 (ICAM-1),

cytokine-induced neutrophil chemoattractant-1 (CINC-1), and prostaglandin E2 (PGE2) ($p<0.05$). The monocyte chemoattractant protein-1, PGE2, and CINC-1 levels of the CV4 pharmacopuncture group were significantly different from those of the control group ($p<0.05$).
Conclusions: These results indicate that cultivated wild ginseng pharmacopuncture at CV4 may have a potent anti-inflammatory effect in an LPS-induced inflammatory rat model.
Key Words: Pharmacopuncture, Cultivated wild ginseng, Anti-inflammation, CV4

(3) **Journal of Meridian and Acupoint, Vol 27, No. 1, 49–62, 2010**

Effects of Manual Acupuncture, Invasive Laser Acupuncture and Laser Skin Irradiation at Liver Seunggyeok on the Repair of D-galN-induced Liver Injury in Rats

Hyung-Jin Shin, Young-Sun Kim, Dae-Hwan Youn, Suk-Hee Lee, Gwang-Hwan Oh, Sung-Ho Jeong, Chang-Su Na

Abstract
Objective: This study was performed to investigate the effect of manual acupuncture, invasive laser acupuncture and laser skin irradiation at LU8, LR4, HT8 and LR2 (Liver Seunggyeok) on D-galN-induced liver injury in rats.
Methods: Liver injury was induced with D-galN. The experimental rats were divided into four groups (control group, EXP-1, EXP-2, and EXP-3). In the control group, liver injury was induced, but was not treated. In the EXP-1 group, liver injury was induced, and manual acupuncture was performed using the Young-Su (against the meridian course and following the course of the meridian) and Won-Bang (twisting and rotating the needle) acupuncture method at Liver Seunggyeok. In the EXP-2 group, liver injury was induced, and invasive laser acupuncture was performed at the Liver Seunggyeok. In the EXP-3 group, liver injury was induced, and laser skin irradiation was performed at the Liver Seunggyeok.
Results: The change of body weight in 1 week was significantly increased in the EXP-1, EXP-2 and EXP-3 groups as compared with the control group. The changes of AST & ALT were significantly decreased in the EXP-1 and EXP-2 groups as compared with the control group. The change in SOD was significantly increased in the EXP-1, EXP-2 and EXP-3 groups as compared with the control group. The change in WBC was significantly increased in the EXP-2 group as compared with the control group.
Conclusions: Manual acupuncture, invasive laser acupuncture and laser skin irradiation at Liver Seunggyeok had a hepatotherapeutic effect on the treatment of hepatocytotoxity. Invasive laser acupuncture was as effective as manual acupuncture in the treatment of hepatocytotocity.
Key Words: Manual acupuncture, Invasive laser acupuncture, Laser skin irradiation, Liver Seunggyeok, D-galN-induced liver injury

(4) **Journal of Meridian and Acupoint, Vol 27, No. 1, 63–85, 2010**

Effects of the Herbal Acupuncture With Corni Fructus Extract at Eumgok (KI10) on Osteoporosis in Ovariectomized Mice

Kwang-Sung Kim, Byungryul Lee, GiYoung Yang, Taek-Won An, Yun-Kyoung Yim

Abstract
Objective: The purpose of this study is to investigate the effects of herbal acupuncture with Corni Fructus extract (CF-HA) at Eumgok (KI10) on osteoporosis in ovariectomized (OVX) ddy mice.
Methods: Several experiments were carried out to analyze the changes in body weight, uterine weight, uterus index, tibial length, ash bone weight, tibial BMD, the levels of serum alkaline phosphatase (ALP), osteocalcin, Ca, and P, and the levels of tibial Ca and P, along with the Ca/P ratio. Histological and histomorphological analyses were also performed.
Results: (1) CF-HA at Eumgok (KI10) did not significantly increase the level of bone mineral density in overiectomized mice. (2) CF-HA at Eumgok (KI10) significantly decreased the level of serum phosphorus in ovariectomized mice and significantly increased the level of serum calcium in ovariectomized mice. (3) CF-HA at Eumgok (KI10) significantly increased the levels of tibial calcium and phosphorus in ovariectomized mice. (4) CF-HA at Eumgok (KI10) significantly decreased the number of tibial osteoclast-like cells in ovariectomized mice. 5() In the histomorphometric analysis of the tibia, GPL (growth plate length) was significantly decreased by CF-HA at Eumgok (KI10) in ovariectomized mice.
Conclusions: These results suggest that CF-HA at Eumgok (KI10) may have useful therapeutic effects on osteoporosis in ovariectomized mice.
Key Words: Corni Fructus, Herbal acupuncture, Eumgok (KI10), Osteoporosis, Ovariectomy

(5) **Journal of Meridian and Acupoint, Vol 27, No. 1, 143–150, 2010**

Survey of the Current Status of and Prospect for the Traditional Medical Market

Jonghyang Yoo, Junhyuk Lee, Kihyun Park, Heejeong Jin, Eunsu Jang

Abstract
Objective: This research aims to determine the current status of and prospect for the traditional medical market to provide a source for developing a strategy and establishing a policy for traditional medicine.
Methods: This research categorized 11,611 clinics registered in the telephone directory as of 2008 by region. Some clinics were extracted via a simple random method, and inquiries in the form of a questionnaire were sent to those clinics. The responses were analyzed based on frequency of a particular response.
Results: (1) The number of the employees in a clinic decreased slightly from 2.9 in 2005 and 2006 to 2.8 in 2007. That of the patients also showed a downward tendency from 11,811 in 2005 through 11,716 in 2006 to 11,344 in 2007. (2) The annual turnover in a clinic increased to 257 million won in 2007 from 232 million won in 2005 through 245 million won in 2006. (3) Approximately 92% of the responses showed that the traditional medical market is in a recession and 21% of the responses indicated the overall economic recession as the primary reason in their opinions. (4) About 29% of the responses presented the extension of medical insurance on traditional medicine as a prior policy.
Conclusions: Based on the survey, the prospect for the traditional medical market is positive, but the effort of the people in the traditional medical system and systematic support from government are required to activate the stagnated traditional medical market.
Key Words: Traditional Korean medicine, Korean medicine, Traditional medical market, Current status

(6) **Journal of Korean Pharmacopuncture Institute, Vol 13, No. 1, 5–14, 2010**

Anticancer Effect of Mountain Ginseng Pharmacopuncture in Mice on Lung Carcinomas Induced by Using NCI-H460 Human Non-small Lung Cancer Cells

Ki-Rok Kwon

Abstract
Objectives: This study was performed to examine the anticancer effect of mountain ginseng Pharmacopuncture (MGP) in nude mice on lung carcinomas induced by using NCI-H460 human non-small lung cancer cells.
Methods: Human lung cancer (NCI-H460) cells were cultured and applied to evaluate anti-tumor activity in nude mice. After confirmed tumor growth had been confirmed in the mice, MGP, 0.1 ml/kg, was performed by intraperitoneal and intravenous injection everyday for four weeks, and the changes in body weights, tumor volumes, mean survival times and percents, life spans, histo-pathological findings, organ weights, and blood chemistry levels were analyzed.
Results: The results of this in-vivo study showed that MGP may have potential, without marked side effects, as a growth inhibitor for solid tumors induced by using NCI-H460. Compared with the control group, MGP exhibited dosage-dependent inhibition of the growth of NCI-H460 cell-transplanted solid tumors. The mean survival time of the MGP-treated group was longer than that of the control group. Generally, intravenous injection was more effective than intraperitoneal injection.
Conclusion: These results suggest that MGP may be a useful anticancer agent for human-lung-cancer therapy, but a follow-up study is needed to provide more certainty.
Key Words: Mountain ginseng pharmacopuncture (MGP), Lung carcinoma, NCI-H460 human non-small lung cancer cells

(7) **Journal of Korean Pharmacopuncture Institute, Vol 13, No. 1, 45–52, 2010**

Experimental Study on the Antibiotic Effects of Fel Ursi Pharmacopuncture Solution on the Bacterial Species That Cause Keratitis

Seong-Sik Yoon, Hyung-Sik Seo

Abstract
Objectives: This experimental study was performed to investigate the effectiveness of Fel Ursi pharmacopunture solution (FUPS) manufactured by using an alcohol/water extraction method for use as eyedrops. For that reason, antibacterial tests were performed on *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Pseudomonas aeruginosa*, *Aspergillus niger*, *Fusarium oxysporum*, and *Candida albicans*.
Methods: After treating on bacterial species (*S. aureus*, *S. epidermidis*, *P. aeruginosa*, *A. niger*, *F. oxysporum*, *C. albicans*) that cause keratitis with FUPS, we investigated the anti-bacterial effects of FUPS on *S. aureus*, *S. epidermidis*, *P. aeruginosa*,